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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/996,244

11/28/2001

Daniel Richard Schaefer

594826-001

3771

27805

7590

09/26/2002

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EXAMINER

BEHREND, HARVEY E

ART UNIT

PAPER NUMBER

3641

DATE MAILED: 09/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/996244

Applicant(s)

Schaefer et al

Examiner

Behrend

Group/Art Unit

3641

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE one MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 6/3/02
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-19, 29-34 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☐ Claim(s) _____ is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☒ Claim(s) 1-19, 29-34 are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

1. Applicant in the "Remarks" section of the 6.3.02 response states:

Above, claims 4-6 and 8-19 are amended to make it clear that the claimed subject matter is the fullerene molecule having the claimed characteristic as contrasted with the use or application of the fullerene per se. The amendments are being made to obviate the restriction requirement relative to the non-method claims.

Applicants' statements/arguments (along with the amendments to the claims) have accordingly been construed as meaning that the claims in each of Groups II, III and IV are directed only to a neutron-containing fullerene molecule, and, that applicants are not also claiming a use or utility in the claims of each of Groups II, III and IV.

Based solely on this understanding, the claims of Groups II, III and IV will be examined along with the claims of elected Group I.

If this understanding is not correct, i.e. if applicants actually are claiming a use or utility in the claims of Groups II, III and IV, applicant is required to so inform the Office in their next response and, the claims of Groups II, III and IV will be withdrawn from further consideration as being drawn to non-elected inventions in accordance with the restriction requirement set forth in the 3/21/02 Office action.

Applicant have also stated in the "Remarks" section of the 6/3/02 response that:

New claims 29-32 define the invention in terms of the characteristic beta emitter properties of the fullerene molecule of this invention. This is in contrast to claims 1-19 which define the invention with reference to a trapped thermal neutron. Based upon this disclosure there cannot be any question that the applicants have enabled persons skilled in the art to prepare fullerene molecules having the claim characteristics.

The applicants submit that claims 29-32 should be free and clear of the §112 rejection which was affirmed upon appeal of the parent application.

New claims 30-32 contain no reference whatsoever to the trapped thermal neutron. While the applicants are confident that the beta particle emitter

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characteristics of the fullerene are indicative of a trapped thermal neutron, claims 30-32 simply recite a fullerene molecule having a beta particle emitter wherein the beta particle emitter is characterized in that it has a half life of about 10 minutes. Accordingly, claims 30-32 are not burdened by any issue regarding the identity of the beta emitter or the location of the trapped thermal neutron.

Applicant in these statements is considered as stating that the invention of claims 30-32 is independent and distinct from the invention set forth in the rest of the claims.

Claims 29 and 34 depend on claim 1 and claim 33 depends on claim 3.

Accordingly, claims 29, 33, 34 are grouped along with claims 1-19.

Claims 31 and 32 depend on claim 30. Claim 30 is directed to a fullerene molecule that is a beta particle emitter having a half life of about 10 minutes.

Based on applicants statements in the "Remarks" section which have been considered as stating that the inventions in these two Groups of claims are independent and distinct, each from the other, restriction is required between the following inventions.

Group A. Claims 1-19, 29, 33, 34 drawn to a fullerene molecule having one or more free thermal neutrons trapped within the fullerene molecule.

Group B. Claims 30-32 drawn to a fullerene molecule that is a beta particle emitter having a half life of about 10 minutes.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).


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2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harvey Behrend whose telephone number is 703-305-1831. The examiner can normally be reached on Tuesday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached on (703) 306-4198. The fax phone number for the organization where this application or proceeding is assigned is 703-306-4195.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-1113.

Behrend/cw
August 28, 2002



HARVEY E. BEHREND
PRIMARY EXAMINER